

Control Number: 27576



Item Number: 161

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PUC DOCKET NO. 27576 SOAH DOCKET NO. 473-03-2933

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APPLICATION OF TEXAS-NEW	§	BEFORE THE STATE OFFICE HE STON
MEXICO POWER COMPANY FOR	§	
FINAL RECONCILIATION OF FUEL	§	\mathbf{OF}
COSTS UNDER P.U.C. PROC. R.	§	
25.236(g)	§	ADMINISTRATIVE HEARINGS

TEXAS-NEW MEXICO POWER COMPANY'S RESPONSES TO CITIES' SEVENTH REQUEST FOR INFORMATION QUESTIONS 1-13

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TEXAS-NEW MEXICO POWER COMPANY'S RESPONSES TO CITIES' SEVENTH REQUEST FOR INFORMATION OUESTIONS 1-13

Texas-New Mexico Power Company ("TNMP") files this response to Cities' Seventh Request for Information. Cities' Seventh Request for Information was received on June 20, 2003. Pursuant to Cities' Seventh Request for Information, TNMP's response is due by July 10, 2003. This response is therefore timely. The answers may be treated by all parties as if the answers were filed under oath.

Respectfully submitted,

TEXAS-NEW MEXICO POWER COMPANY

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ATTORNEYS FOR TEXAS-NEW MEXICO POWER COMPANY

CERTIFICATE OF SERVICE

Counsel for Texas-New Mexico Power Company, hereby certifies that a copy of this document was served on all parties of record in this proceeding on July 10, 2003, by hand delivery, facsimile, or United States mail, postage pre-paid.

be P. Reynolds

QUESTION 1 Refer to the filings made by TNMP in Docket No. 21534, please reconcile

the numbers presented in the resource plan filed in this Docket with the

contracted amounts presented in WP/FR-7.

The requested reconciliation is attached. **RESPONSE:**

SPONSOR:

Larry P. Gunderson

ATTACHMENT(S): Reconciliation Between 2000 Resource Plan and

WP/Schedule FR-7 (Cities' 7-1.xls)

TNMP FR 01243

QUESTION 2 When did TNMP become a control area? What duties were performed by

the control area? Who performs these duties now?

RESPONSE: TNMP became one of the Control Areas in the ERCOT system at 11:00 AM on

July 31, 1996. The Control Area balanced resources to meet the actual demand

at any given time. ERCOT performs these duties now.

SPONSOR: Larry P. Gunderson

QUESTION 3 Please provide Reliant's response to TNMP's RFP for power in 2000.

Please provide responses of all other bidders. If no written response exists,

please provide all notes from verbal solicitations (refer to Gunderson at

page 14).

RESPONSE: Please refer to TNMP's attachments in response to Staff's First Request for

Information BA-18, TNMP FR CONFID 02021 through TNMP FR CONFID

02033.

SPONSOR: Larry P. Gunderson

QUESTION 4 Please provide the same information requested above for the Panda/Lamar and ENRON contract in 2001.

RESPONSE:

Please refer to TNMP's attachments in response to Staff's 1st RFI BA-18, TNMP FR CONFID 02012 through TNMP FR CONFID 02020. In addition, TNMP attaches the following bids not previously produced. This information is being provided pursuant to the Protective Order entered in this docket. TNMP information HIGHLY SENSITIVE PROTECTED designates MATERIALS. Counsel for TNMP has reviewed the information sufficiently to state in good faith that this information merits the Highly Sensitive Protected Materials designation and that it is exempt from public disclosure under the Public Information Act, Tex. Gov't Code ch. 552 under sections 552.101 and 552.110. Because these documents contain sensitive commercial and financial information that is recognized as confidential under PURA §32.101, they are exempt under section 552.101 and 552.110. Moreover, this information includes trade secret information exempt under section 552.110. The information used to develop this response constitutes information that is not widely available or known outside of TNMP, is information that the parties have spent considerable time and effort in acquiring and analyzing, and such information and analysis would be of considerable value to competitors of TNMP to the serious detriment of TNMP.

SPONSOR:

Larry P. Gunderson

ATTACHMENT(S): ECI Bids

TNMP FR CONFID 09393 to TNMP FR CONFID 09398

QUESTION 5 Please provide the information included in RJS-3 by month. What type of

ancillary services were provided by Constellation? Please provide costs

for each service by month.

RESPONSE: Please refer to TNMP's response to Question 3 of TIEC's First Request for

Information, which provides the information included in RJS-3 by month.

Constellation provided responsive, regulation, and non-spinning reserves. The

energy charge of \$1.88 per MWh is not broken down by service provided.

SPONSOR: Rowan J. Sanders/Richard J. Kilar

QUESTION 6 Why is TNP One's heat rate so much higher than other lignite and coal

units in the country? Provide all documents, analysis, studies, and reports

supporting your explanation. Please provide all data of comparable units

and their heat rates, including the underlying units comprising the NERC

averages.

RESPONSE: See attachment, describing the typical characteristics of Circulating Fluidized

Bed (CFB) boilers similar to that used at TNP One. The heat rate of TNP One

is comparable to other CFB boilers.

SPONSOR:

Rowan J. Sanders

ATTACHMENT(S):

Power Supply Loads/Resources Current Condition

TNMP FR 01244 to TNMP FR 01251

QUESTION 7 Why are Schedules FR-4.4b and c confidential? Please identify the

"highly or Competitively Senstive" information contained in it.

RESPONSE: Schedules FR.4-4b and c, read together, reveal the highly sensitive pricing and

volume information related to competitive off-system sales transactions.

Pricing information regarding competitive off-system sales is not widely

available or known outside of TNMP, is information that TNMP has spent

considerable time gathering and analyzing, and is information that would be of

considerable value to competitors of TNMP to the serious detriment of TNMP

and its customers.

SPONSOR: None ATTACHMENT(S): None

QUESTION 8

Refer to Schedule FR-7, why does TNMP need emergency assistance? When and why was it utilized? Please quantify any costs paid to any supplier for this service during the 6/1/2001 thru 12/31/2001 time frame and explain why the service was needed.

RESPONSE:

The information requested by this RFI is being provided pursuant to the Protective Order entered in this docket. TNMP designates this information HIGHLY SENSITIVE PROTECTED MATERIALS. Counsel for TNMP has reviewed the information sufficiently to state in good faith that this information merits the Highly Sensitive Protected Materials designation and that it is exempt from public disclosure under the Public Information Act, Tex. Gov't Code ch. 552 under sections 552.101 and 552.110. Because these documents contain sensitive commercial and financial information that is recognized as confidential under PURA §32.101, they are exempt under section 552.101 and 552.110. Moreover, this information includes trade secret information exempt under section 552.110. The information used to develop this response constitutes information that is not widely available or known outside of TNMP, is information that the parties have spent considerable time and effort in acquiring and analyzing, and such information and analysis would be of considerable value to competitors of TNMP to the serious detriment of TNMP.

See attached "ERCOT Operating Guide No. III, Subpart A." and the applicable invoices for emergency assistance.

SPONSOR: Larry P. Gunderson

ATTACHMENT(S): ERCOT Operating Guide No. III,

TNMP FR 01252 to TNMP FR 01253

Invoices, TNMP FR CONFID 09399 to TNMP FR CONFID 09401

QUESTION 9 Please identify all purchases from Big Wind/Ceilo Wind Power included in

EFE.

RESPONSE: There were no purchases from Big Wind/Ceilo Wind Power included in

eligible fuel expense.

SPONSOR: Larry P. Gunderson

QUESTION 10 Why was the Constellation Power Supply and Service Agreement

amended on June 1, 2001 and July 31, 2001? Please provide a list of

changes that were made and a justification for amending it. Provide all

analysis, reports, memos, studies, and documents regarding the

amendments.

RESPONSE: The Constellation Power Supply and Service Agreement was amended on June

18, 2001 to fix the fuel index in the energy rate for the period beginning June

18 through and including December 31, 2001. TNMP has no responsive

documents related to this amendment.

The parties amended the agreement on July 31, 2001 to revise the calculation in

the original agreement related to financial settlement for future power

purchases. This amendment was necessary to account for Constellation taking

on the responsibility for the load previously served by West Texas Utilities.

TNMP has no responsive documents related to this amendment.

SPONSOR:

Rowan J. Sanders

ATTACHMENT(S):

None

QUESTION 11 Why was the TXU agreement amended on June 1, 2001 and July 31, 2001?

Please provide a list of changes that were made and a justification for

amending it. Provide all analysis, reports, memos, studies, and documents

regarding the amendments.

RESPONSE: The TXU agreement was amended on July 30, 2001, to define the relationship

pursuant to which TXU would forecast and manage the TNMP load under the

existing full requirements contract. The amendment was necessary to reflect

the change to an ERCOT single control area. The amendment provides for the

following:

• TXU will forecast TNMP load inside the Lewisville point of delivery.

TNMP will provide TXU with ERCOT data on Lewisville customers on a

daily basis.

• TXU's pricing includes the cost of ancillary services and ERCOT fees.

· TNMP may assign the contract of First Choice Power.

TNMP has no responsive documents related to this amendment.

SPONSOR: Rowan J. Sanders

QUESTION 12 What long-term contract is Schedule FR-20 referring to? Why are they

considered "long-term"? Please provide documentation supporting your

answer.

RESPONSE: TNMP had four long-term supply agreements in effect prior to 2000. Two of

these were full-requirements contracts: one with West Texas Utilities and

another with TXU Utilities. In addition, TNMP had two other firm long-term

contracts: one with Calpine Services Company, formerly Clear Lake Co-

generation Company and another with HL&P (now Reliant Energy). These

contracts are considered "long-term" because unlike the other contracts, which

do not extend past three years, the above-referenced agreements have all been

in effect for over ten years.

SPONSOR: Larry P. Gunderson

QUESTION 13 Refer to FR-21, what are "eligible TNP One Replacement Costs"? Why

does TNMP consider them eligible? Provide cites to Commission rules

and/or orders supporting its eligibility.

RESPONSE: This is terminology that was applied from the last fuel reconciliation. The

column on Schedule FR-21 reflects a portion of the native purchases as shown

on Schedule FR-4.3 (b) and FR-4.3 (e) allocated to replacement power.

Substantive Rule §25.236 (a)(1)(4) allows for the recovery of Account 555 –

Purchased Power Expenses as eligible fuel.

SPONSOR: Richard J. Kilar

Texas-New Mexico Power Company Reconciliation Between 2000 Resource Plan and WP/Schedule FR-7 (MW)

		<u>Total</u>
Supply Per Resource Plan		
Installed Capacity (TNP One)	304	
Contract Capacity	1,016	
Pilot program supply (Bryan Texas Utilities ("BTU")) ¹	34	
Reserves associated with pilot supply	5	
Reserves associated with full requirements contracts	33	
Total Supply Per Resource Plan	1,392	
Supply Excluding Installed Capacity:		
TNP One		
Net Supply Per Resource Plan		1,088
Contract Capacity Per Workpaper Schedule FR-7		
Clearlake/Calpine	250	
Calpine Contract	50	
HL&P/Reliant	60	
Lamar	250	
Reliant	50	
Sweeny	100	
TXU (full requirements)	200	
Union Carbide Corporation	60	2
West Texas Utilitities	31	3
Total listed in WP/Schedule FR-7	1,051	
Not listed in WP/Schedule FR-7		
BTU - Pilot Program	34	
Total Per Schedule FR-7 & BTU		1,085

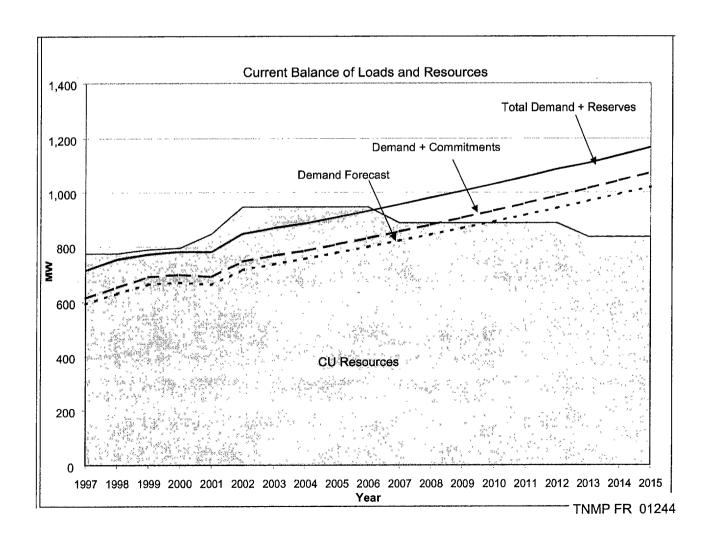
¹ Gatesville/Olney Acquisition Pilot Program

² Union Carbide incorrect on WP/FR-7. Should be 60 MW versus reported 70 MW.

³ WTU was forecasted to be 31 MW for 2000. WP/Schedule FR-7 shows n/a.



Loads/Resources Current Condition



Generation Options

Solid Fuel Options:

Pulverized Coal (PC)

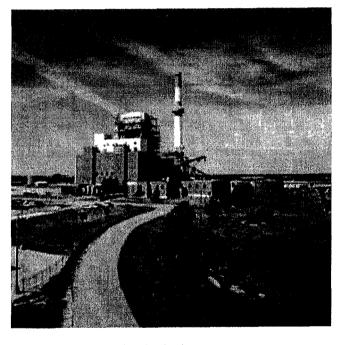
A PC coal fired facility is similar to CU's James River and Southwest power stations. The facility processes coal and burns it in a boiler. The steam produced by the boiler is used to turn a steam turbine and generator to produce power.

Characteristics of a PC facility:

- 20 MW to 1300 MW capacity per unit.
- Boiler design is based upon a "type" (bituminous, sub-bituminous, lignite, PRB) of coal. There are limited fuel switching options. Oil and natural gas conversion of the units is possible.
- Cycle efficiency: 9,000 to 12,000 Btu/KWH.
- Long permitting to operational timeframe: 5+ years.
- Installation cost: \$1,500 to \$2,200/KW (depending on location and unit size).
- Best suited for baseload operation but can be designed for cyclic operation.
- Environmental: Large strides have been made to improve the emissions for PC. These technologies are built into the cost of the unit listed.
- Coal is the most stable of the fossil fuels with regard to cost.
- · Capable of system load following.
- Ash by-product must be landfilled or sold and recycled for use in production of other products (cement, beneficial fill, roads).

Coal: Circulating Fluidized Bed (CFB)

This is similar to the PC coal facility except it utilizes a specially designed boiler. The boiler utilizes a series of fuel beds (grates) that allow the fuel and other material to burn on the beds. These boilers combust the coal at lower temperatures and are inherently cleaner burning boilers.



Characteristics of CFBs:

- 20 MW to 300 MW capacity per unit.
- Can burn non-coal fuels, waste products up to 5% to 10% and materials designed to lower emissions.
- Cycle efficiency: 10,000 to 12,000 Btu/KWH.
- Long permitting to operation timeframe: 5+ years.
- Installation cost: \$1,600 to \$2,300/KW (depending on location).
- Best suited for baseload operation.
- Environmental: A clean coal technology.
- Ash by-products are generally landfilled and cannot be recycled.

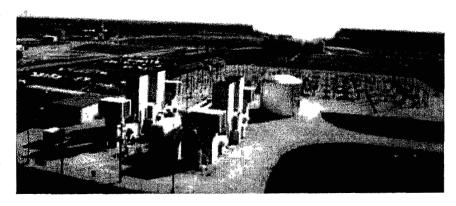
Natural Gas Options

Simple Cycle Gas Turbines

Simple Cycle Gas Turbines are units similar to the peaking units CU has installed at the McCartney Generating Station. These units, regardless of manufacturer have the following characteristics:

- 5 MW to 150 MW output capacity per unit.
- Multiple fuel options (natural gas, fuel oil).
- Efficiency: heat rate 10,500 to 12,000 Btu/KWH.
- Short order to operational timeframe: 1.5 to 2 years.
- Installation cost: \$400 to \$500 per KW.
- Better suited to peaking and intermediate operation. Capable of baseload operation but there is limited long-term cost data associated with baseload operation.
- Quick start capability (10-20 minutes).
- Environmental: Relatively low NOx and SO2 emissions and no solid waste by-products due to fuel options.

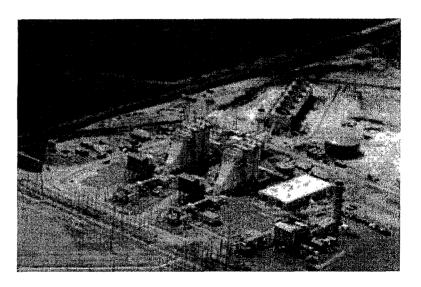




- Load following capability.
- Fuel Risk: Natural gas has the most volatile pricing swings.

Combined Cycle Gas Turbines

A Combined Cycle facility is the combination of a Simple Cycle Gas Turbine with a heat recovery steam generator (HRSG boiler) and steam turbine. The gas turbine exhaust gases (typically 950°F to 1050°F) are introduced to HRSG to produce steam. The steam is routed to a steam turbine/generator. The steam turbine generator will produce approximately 50% of the MWs produced by the gas turbine. Consequently, the Combined Cycle design is inherently more efficient than the Simple Cycle alone (50% more output for the same fuel input) but also more capital intensive due to the additional equipment required.

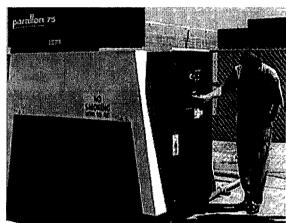


- Output range: 75 MW to 500 MW (depending on the size of gas turbine. Some designs use multiple gas turbines with a single HRSG).
- Multiple fuel options (natural gas, fuel oil).
- Efficiency: heat rate 6,500 to 7,500 Btu/KWH.
- Order to operation timeframe: 2-3 years.
- Installation cost: \$800 to \$1,100/KW.
- Designed for intermediate to baseload operation. It should be noted that the gas turbine's ability to supply long-term baseload operation is still being evaluated, as there is limited historical data available.
- Fuel Risk: Natural gas has the most volatile pricing swings.
- Restricted ability to follow system load swings.

Distributed Generation

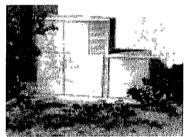
The premise behind distributed generation is the installation of small generators at the load source (industrial centers, grocery/shopping centers, large neighborhoods). Distributed generators are higher

in cost to install due to the loss of economies of scale. They eliminate the need for expensive transmission/distribution upgrades but require extensive upgrades of the natural gas system. This option has a higher overall cost to customers than a larger baseloaded single unit option.



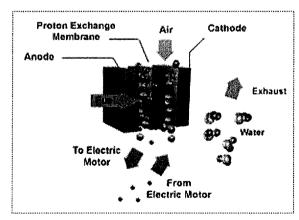
Microturbines

Microturbines are small-scale combustion turbines ranging in size from 28 kW to 500 kW, which include a compressor, combustor, turbine, alternator, recouperator, and generator. They have the potential to be located on sites that have space limitations to produce power. The advantages of microturbines are that there are a small number of moving parts, are compact in size and light weight.



Fuel Cells

This technology converts fuel (natural gas), a chemical process, to an electrical output. cells are inherently low in emissions but to not efficient in their conversion process. have a relatively high capital installation (\$3,000+/KW) and produce small quantities (largest commercial unit is 2.5 MW). This technology is not considered practical or commercially viable for CU's needs.



through Fuel date are They cost of power

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Utility Industry in Transition

- Major market players in financial trouble
 - -- Enron
 - -- Williams
 - -- Aguilla
 - -- Dynegy
- · Divestiture of generation assets
 - -- Announced sale of assets
 - -- Announced shutdown of existing assets
 - -- Delay/cancellation of new generation products
- Market price volatility
- Mergers and acquisitions of utility companies

Most Viable Generation Options

- Pulverized coal
 - -- Lowest evaluated cost option
 - -- Meets or exceeds all regulated environmental standards
 - -- Stable "Life of Project" operation costs
 - -- Installation cost of \$1,500 to \$2,200/KW
 - -- Five-plus year process to permit, design and construct
- Combined Cycle Gas Turbine
 - -- Meets or exceeds all regulated environmental standards
 - -- Historically volatile fuel costs
 - -- Installation cost of \$800 to \$1,100/KW
 - -- Three year process to permit, design and construct

ERCOT OPERATING GUIDE NO. III EMERGENCY OPERATION

Emergency operation is intended to address operating conditions under which the reliability of ERCOT is inadequate. During emergency operation, the ERCOT ISO can order Load and Generating Entities and their host Control Areas to take specific operating actions that would otherwise be discretionary. On orders of the ISO and in compliance with ERCOT Operating Guides, the Control Areas shall direct Load and Generation Entities to take appropriate action(s). The ISO may approve Unplanned Service for immediate implementation to resolve or alleviate a Load Entity's deficit condition or to restore frequency. Control Areas shall coordinate with each other and the ISO to assure that necessary actions are taken to maintain service reliability under any circumstances. The following describes various types of emergency operation and the associated permissible actions that can be ordered by the ISO.

A. <u>EMERGENCY ASSISTANCE</u>

All Generation Entities who have notified the ISO of available capacity either verbally, through OASIS postings, Daily Operating Plans, or other means and Transmission Providers in ERCOT are obligated to deliver and all Load Entities in ERCOT are obligated to receive Emergency Assistance as ordered by the ISO and coordinated by their host Control Area(s). Load entities are obligated to maximize their use of resources available (including contracted or tariffed resources) and/or acquire capacity/energy from the market place as needed to assure that they meet their ERCOT compliance obligations without having to rely on Emergency Assistance. Generation Entities who have provided notification to the ISO of available capacity are obligated to keep this information current, so the ISO has an accurate indication of available capacity in ERCOT.

Whenever at least one Load Entity does not have committed capacity sufficient to provide both its load and its Responsive Reserve Obligation and such condition has persisted for at least 2 minutes, the ISO can order such Entity through its host Control Area to receive Emergency Assistance in the form of capacity and energy to eliminate the deficiency and can specify the Generation Entity(ies) and its/their host Control Area(s) from whom the Emergency Assistance is to be received. The ordered Emergency Assistance, unless the ISO and delivering Entity(ies) mutually agree otherwise, shall be for a minimum of one hour and shall continue from hour to hour until the need for the ordered Emergency Assistance is eliminated by alternative capacity and energy supply sources, reduction of sales, or other means. When the need for the ordered Emergency Assistance is eliminated, the receiving Load Entity should notify the Host Control Area. The Host Control Area should then contact the ISO to request release of the order.

Emergency assistance can be supplied from on-line units, units started for the purpose or from DC Tie(s) at the request of the ISO. For emergencies external to ERCOT, the ISO will coordinate the scheduling of any power which may be delivered to the DC Tie(s) with the operator of the tie(s).

For any emergency expected to last more than two hours, a Recovery Plan will be submitted to the ISO by the host Control Area(s) for the affected Load and Generation Entities. All Entities involved in the Recovery Plan will update their Daily Operations Plan through their host Control Area(s) within 2 hours showing how the emergency will be resolved.

A. <u>EMERGENCY ASSISTANCE (CONT.)</u>

TNMP FR 01252

ERCOT OPERATING GUIDE NO. III EMERGENCY OPERATION

The ISO shall not approve transaction requests that create or increase a deficit with respect to a Load Entity's Responsive Reserve Obligation. However, the ISO can order delivery of Type E assistance from Responsive Reserve providers or approve a transaction request for delivery from a Responsive Reserve provider. Such action shall not be considered to cause deficiencies of Responsive Reserve Obligation by the amount of assistance ordered, or the amount of the approved transaction. Examples of events that may result in emergency operation requiring Emergency Assistance to be delivered to a Load Entity and its Load Host Control Area include the following:

- 1. Unexpected loss of capability
 - a. The ISO can specify that Emergency Assistance be scheduled instantaneously to restore frequency.
 - b. The frequency should be restored to pre-disturbance conditions within 10 minutes following an event.
- 2. Unexpected problems in starting a unit
- 3. Unexpected loss of transmission lines or transformers required for the delivery of capability to a Control Area
- 4. Inability of a Load Entity's supplier of capability to deliver due to reasons 1 through 3 above
- 5. Inability to maintain Responsive Reserve greater than or equal to obligations or to otherwise serve demand due to a missed load forecast
- 6. Unexpected loss or reduction of fuel supply

TNMP FR 01253